

(No Model.)

M. MATTSON.

MEDICAL POWDER INJECTOR.

No. 280,202.

Patented June 26, 1883.

Fig. 1.

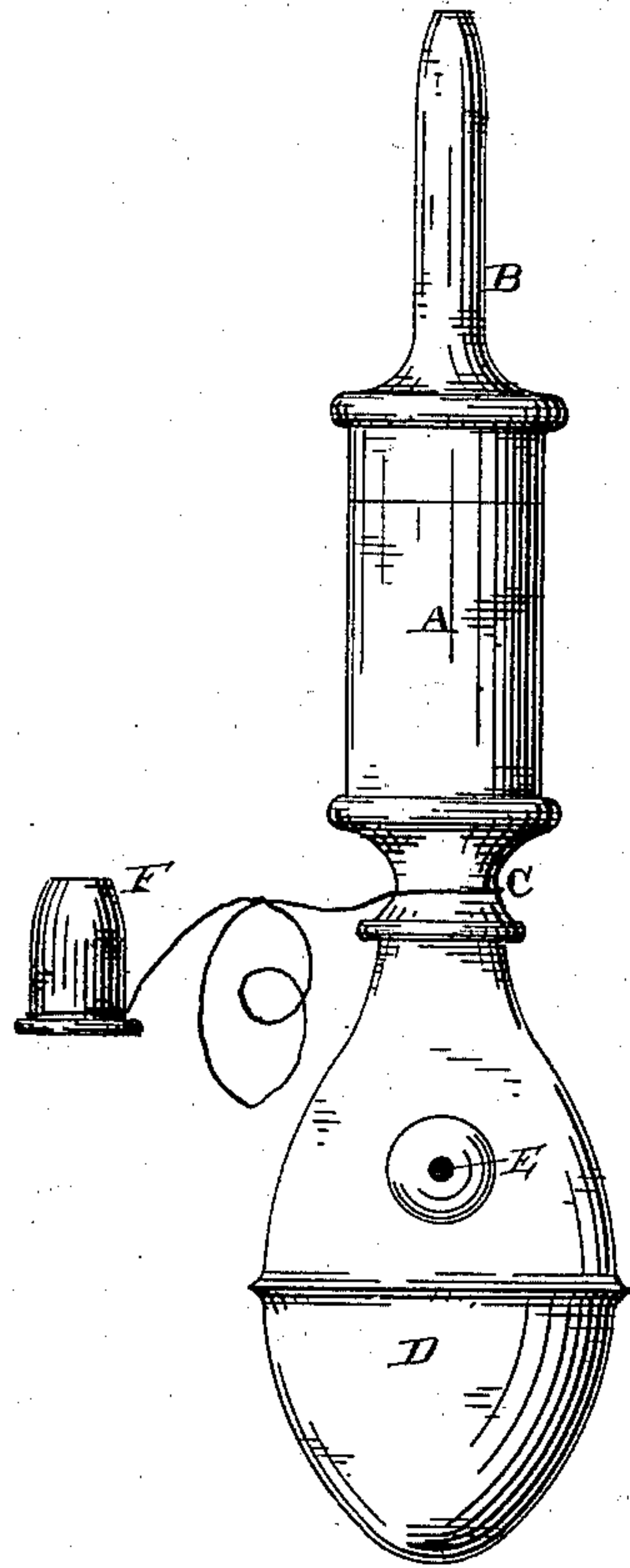


Fig. 2.

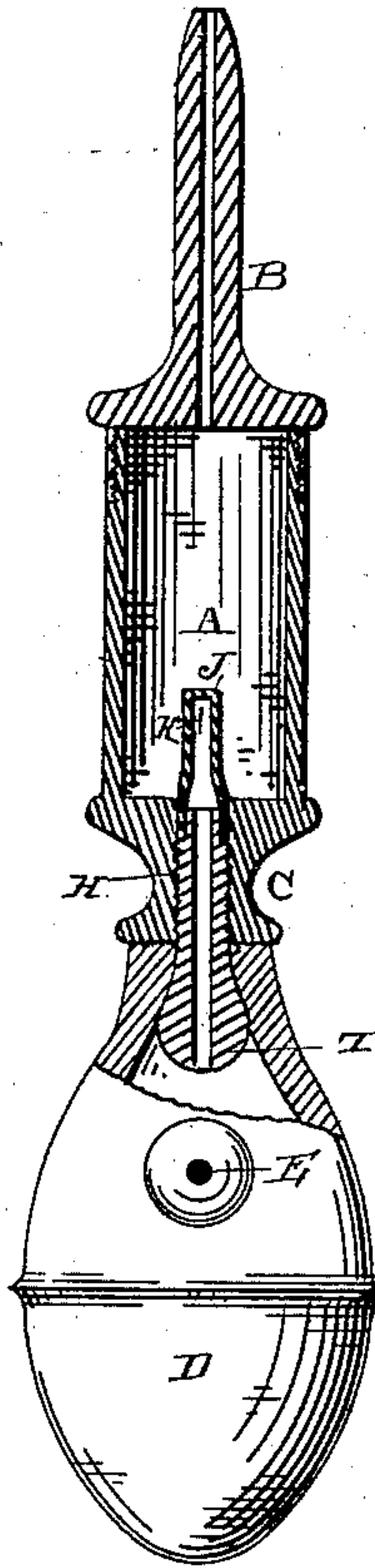


Fig. 3.



- WITNESSES -

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MEDICAL-POWDER INJECTOR.

SPECIFICATION forming part of Letters Patent No. 280,202, dated June 26, 1883.

Application filed May 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, MORRIS MATTSON, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Powder - Projectors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in powder-projectors, consisting of the combination of the reservoir, the removable outlet-tube, the elastic bulb having an air-inlet, the headed tube which serves to connect the bulb to the reservoir, and the elastic tube having a slit in its side, substantially as shown.

The object of my invention is to furnish a powder-projector for the introduction of medicated or remedial powders into the air-passages, which may be the seat of catarrhal or other forms of disease, and also to provide a projector of such convenient size and shape as to be carried in the pocket, ready for instant use, even in the dark, where other forms of projectors cannot be used with that convenience and facility which are desirable.

Figure 1 is a side elevation of a powder-projector embodying my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 represents a naso-pharyngeal tube to be used in connection with my projector.

A represents the reservoir or receiver in which the medicated powder is placed, and which reservoir may be made of any desirable shape or size, being provided with a screw-thread or other means for connecting with the outlet-tube B. At the inner end of this reservoir is formed a double tubular connection, C, through which passes a hollow screw, H, the screw having at its outer extremity a connector, T, to receive and secure the bulb D. Connected with the screw H at its inner end is a vulcanized soft-rubber air-tube, J, having its terminal extremity closed, and being provided with a slit, K, through which air passes from the bulb into the reservoir. The bulb is provided with an aperture, E, through which air is admitted, and by closing the aperture and forcibly compressing the bulb in the hand air is forced into the reservoir and discharged

through the outlet-tube, carrying with it a nebula of the powder contained in the reservoir. This construction and arrangement of parts admits of no retrograde passage of the air, and thus prevents the powder from being sucked from the reservoir into the bulb. In order to prevent the escape of powder from the reservoir when the instrument is carried loosely in the pocket, I provide the cap of soft rubber, F, which closes the outer extremity of the tube B. At Fig. 3 is illustrated a naso-pharyngeal tube, O, of suitable length, with its terminal extremity upturned at a suitable angle, which may be connected with the tube B by being pressed upon it. A preferable position in which to secure the tube O is to have the upturned portion in a line with the aperture in the bulb, which renders it more convenient in use.

This invention is intended for the use of medicated powders which are to be brought in contact with the interior lining or mucous surface of the nasal cavities, throat, larynx, or air-passages of the lungs in catarrhal and other affections. It is more efficient than the ordinary powder-inhalers, and less inconvenient and troublesome than the tubular powder-projectors, which have to be filled previous to each puff or application of the powder. With my invention the powder may be projected with any degree of force necessary to insure its contact with the diseased air-passages. The nasal cavities, for example, may be more or less obstructed, and in that condition will require a greater projectile force to introduce and diffuse the powder than when the cavities are free from obstruction.

My invention is so devised as to contain a sufficient quantity of powder for repeated application, and therefore does not require to be refilled after each application of the powder. This is one of its special advantages, particularly as it is so small as to be carried in the vest or other side pocket, ready for use at any moment, night or day. For example, the instrument being placed at the bedside of a person liable to a sudden or violent cough during the night, he may take it up, even in the dark, and make an application of the remedial powder. This he could not do with a tubular instrument, as heretofore mentioned, without more or less inconvenience or vexation in pro-

curing a light and adjusting the powder for each application.

Having thus described my invention, I claim—

- 5 In a powder-projector, the combination of the reservoir A, the removable outlet-tube B, the elastic bulb, having an air-inlet, E, the headed tube H, which serves to connect the bulb to the reservoir, and the tube J, having

the slit K in its side, substantially as shown in and described.

In testimony whereof I affix my signature in presence of two witnesses.

MORRIS MATTSON.

Witnesses:

I. FRED. DOTY,
JNO. B. COLE.